Nutrient Management Q&A

Quick Answers to Iowa Producer Questions

Why is nutrient management important?

Many water quality concerns are caused by excess nutrients in our streams, lakes and rivers. Nitrogen and other excess nutrients threaten our drinking water, produce toxic algal blooms, kill aquatic life, and reduce or prohibit recreational opportunities, among others. By practicing nutrient management and following the guidelines set by many permits and plans, water quality problems created by excess nutrients can be reduced.

What is required?

Manure Management Plans (MMP) are required by the state, based on operation size and type. (See MMP below for details.) **National Pollutant Discharge Elimination System (NPDES)** permits are required of certain operations by the federal government. The federal government is also considering requiring Permit Nutrient Plans as part of the NPDES permit.

An NPDES is a federally required permit for any entity, including farms and factories, that is considered a point-source for pollution. Currently open feedlots in Iowa meeting certain criteria are required to have an NPDES permit. These criteria include having more than 1,000 animal units and/or operations with between 300 and 1,000 animal units that discharge directly into a water of the state. If you question whether you are required to have a NPDES permit, contact the Iowa Department of Natural Resources (IDNR).

What is voluntary?

Currently **Nutrient Management Plans (NMP)** and **comprehensive nutrient management plans (CNMP)** are voluntary guidelines set by the federal government. However some participants in EQIP, 319 projects, and/or WPF projects need to have and follow a nutrient management plan as part of their participation in those programs.

The Plans

What is a manure management plan?

Administered by Iowa Department of Natural Resources (IDNR), these plans establish manure application rates based on nitrogen needs of the crop to be grown. They are required for confinement feeding operations of a certain size (greater than 200,000 pounds of swine or poultry and greater than 400,000 pounds of bovine) built or expanded after May 31, 1985. Confinement facilities using dry manure systems are **not exempt**.

These plans must be submitted on MMP designated forms which are available on the Internet, at IDNR field offices or from the Iowa Manure Management Action Group. IDNR is still accepting plans; plans submitted after September 18, 2001, MUST be approved by IDNR before manure can be applied.

Anyone can develop a plan; no certification is required. The plans require certain elements including manure storage structure, number of animals confined, average weight of animals, manure production, nitrogen production, method of application, application loss factor, nitrogen availability, crop rotation, optimum yields, crop nitrogen needs and N credits.

What is a nutrient management plan?

These plans are developed by the Natural Resources Conservation Service (NRCS) and Iowa Department of Agriculture and Land Stewardship-Division of Soil Conservation (IDALS-DSC) or private service providers. Nutrient management plans follow the requirements of the NRCS's 590 nutrient management standard, which is based on nutrient needs of the crop and risk assessment tools. A certified person must review and approve the plan.

NRCS
Natural Resources Conservation Service

February 2002

These plans deal specifically with managing the amount, source, placement, form and timing of application of all nutrients and soil amendments. Specific forms are not required, but specific requirements must be included in the plan. An NMP is developed for producers requesting technical assistance on nutrient management through various voluntary programs, like EQIP.

What is a comprehensive nutrient management plan?

A Comprehensive Nutrient Management Plan (CNMP) is a component of the Unified National Strategy for Animal Feeding Operations. It is a grouping of conservation practices and management activities which,when combined into a system,will help ensure that agricultural production goals are achieved while protecting water quality. A CNMP can be developed by NRCS or private service providers for livestock producers on a voluntary basis.

What is a permit nutrient plan?

This is a proposed requirement of the National Pollutant Discharge Elimination System (NPDES) permit administered by IDNR for EPA. It is a site-specific plan that describes how a producer intends to meet the effluent discharge limitations and other requirements of the NPDES. Final rules are expected in December 2002.

What is a total maximum daily load plan?

A total maximum daily load (TMDL) plan is required when a waterbody exceeds state water quality standards. The plan,developed by IDNR using public input, must show how the pollutant will be reduced to meet those standards. The 1972 Clean Water Act charges IDNR with this program with EPA oversite.

The Tools

What is the NRCS nutrient management standard (590)?

This is the guidance provided to NRCS field staff and other planners when providing technical assistance to producers participating in voluntary programs. The purpose of the 590 standard is to meet the nutrient needs of the crop to be grown,while minimizing the loss of nutrients to surface and ground water.

What is the phosphorus index?

This is a risk assessment tool developed by Iowa State University, National Soil Tilth Laboratory and NRCS. The Index is used to help conservation planners, landowners/landusers and others evaluate the risk of phosphorus reaching surface water and to determine factors which affect that risk. Using the index helps decision makers choose management options which minimize that risk.

What is the EPA's nutrient criteria?

These criteria are determined by IDNR with EPA oversight and guidance. EPA has established Eco-regions to develop specific locally appropriate guidelines for water quality criteria for nutrients in lakes, reservoirs, rivers, streams and wetlands. Nutrients of concern in Iowa include nitrogen and phosphorus.

More Info

Where can I get more information?

Contact your local NRCS,IDNR or Extension office for help and guidance. The following websites also contain helpful information.

Iowa NRCS	www.ia.nrcs.usda.gov
IMMAG	extension.agron.iastate.edu/immag
IDNR	www.state.ia.us/government/dnr/organiza/epd/wastewtr/feedlot/feedlt.htm
ISU Extension	extension.agron.iastate.edu/
EPA	es.epa.gov/oeca/ag/